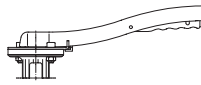


ARI-ZIVA®-Z - Fig. 014 - Free of maintenance wafer pattern butterfly valve - soft sealed - industrial range

ARI-ZIVA®-G - Fig. 015 - Free of maintenance butterfly valve with threaded eyelets - soft sealed - industrial range

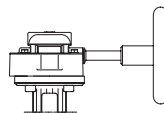
**ARI-ZIVA®-Z / ARI-ZIVA®-G**  
with notch lever



Page 6

**ARI-ZIVA®-Z / ARI-ZIVA®-G**  
with worm gear

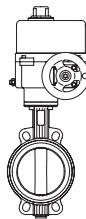
- With variable adjustment
- Self-locking



Page 6

**ARI-ZIVA®-Z / ARI-ZIVA®-G**  
with electric rotary actuator rotork

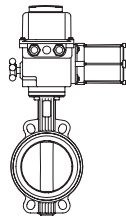
- for intermittent and continuous service
- 230V 50Hz
- Enclosure IP 67



Page 7

**ARI-ZIVA®-Z / ARI-ZIVA®-G**  
with electric rotary actuator Deufra

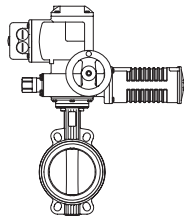
- type of operation, on/off S4 30% (or control S4 50%)
- 230V 50Hz (400V 50Hz)
- Enclosure IP 67



Page 8

**ARI-ZIVA®-Z / ARI-ZIVA®-G**  
with electric rotary actuator Auma

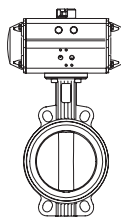
- for temporary service S 2-15 min. (or control S4 25%)
- 400V 50Hz (230V 50Hz)
- Enclosure IP 67



Page 9

**ARI-ZIVA®-Z / ARI-ZIVA®-G**  
with pneumatic rotary actuator AIR-TORQUE / bar

- Function: double acting
- Function: single acting, spring closes (opens)
- Actuating pressure 6 bar (=0,6 MPa)



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Fig. 014 - ARI-ZIVA®-Z

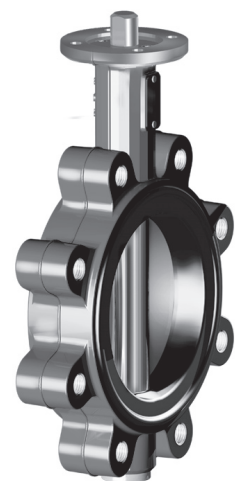


Fig. 015 - ARI-ZIVA®-G

**Features:**

- Soft sealing
- Maintenance-free
- Good flow characteristic due to excellent Zeta-values
- Nodular iron body
- High quality epoxyd coating
- EPDM (W270) / NBR / FPM lining
- Changeable lining, body detachable
- Straight through spindle with 3 supports
- Spindle blow out protection
- Stainless steel disc
- Shaft / Disc connection not in contact with the medium
- Complete insulation possible according to the german „Energy saving order - EnEV“
- Dew point barrier
- Central disc bearing
- Slip on flange DIN EN 1092-1
- EPDM with DIN DVGW Reg. drinking water (DW6201BR0460)
- NBR approval for DIN DVGW Reg. Gas (NG4313BQ0462)

**ARI-ZIVA®-Z:**

- **Wafer type**

**ARI-ZIVA®-G:**

- **Lug type**
- As a pipe-end valve
- Pipeline one-side detachable

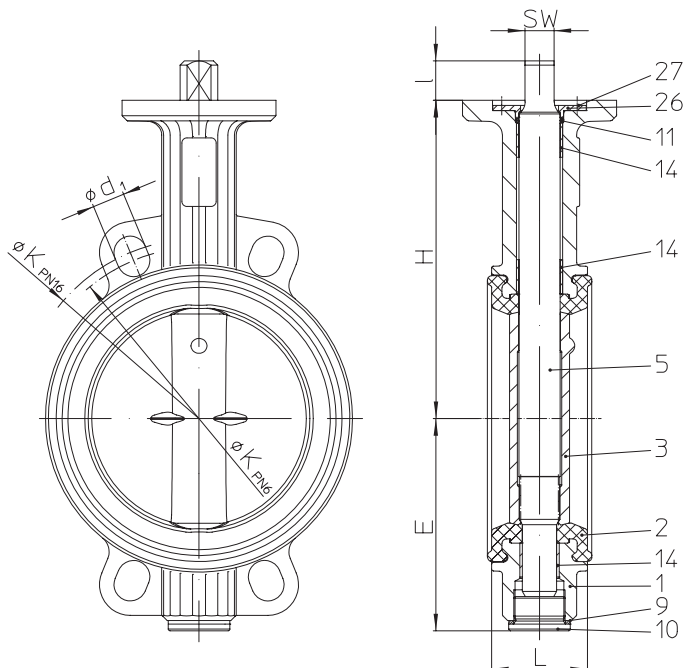
**Butterfly valve with elongated eyelets - industrial range (SG iron)**


Figure	Nominal pressure	Material	Nominal diameter
20.014	PN6	EN-JS1030	DN25-600
21.014	PN10	EN-JS1030	DN25-600
22.014	PN16	EN-JS1030	DN25-600
Body material EN-JS1049 on request			
Washer:	1.4581		
Stem:	<ul style="list-style-type: none"> <li>• 1.4021+QT</li> <li>• 1.4571</li> </ul>		
Seat:	<ul style="list-style-type: none"> <li>• EPDM -20 °C to +130 °C</li> <li>• NBR -10 °C to +80 °C</li> <li>• FPM -10 °C to +150 °C (not for hot water useable)</li> </ul>		
max. gauge press.:	16 bar (DN25-150) 10 bar (DN200-500)		
Actuation arrangement: (refer to page 6-11)	<ul style="list-style-type: none"> <li>• Notch lever</li> <li>• Worm gear</li> <li>• Electric actuator</li> <li>• Pneumatic actuator</li> </ul>		
Test:			
Sealing leakage test	EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)		
DVGW-Registration	EPDM DN25/32-600 for drinking water Reg.-Nr. NW-6201BQ0460 acc. to DIN EN 1074-1/-2 NBR DN25/32-300 for gas Reg.-Nr. NG-4313BQ0462 acc. to DIN EN 13774 (Operating range -10 °C to +60 °C)		

**Selection of possible applications**

Industrial facilities, chemical plants, ship building, special applications in the building technology, etc.  
(other applications on request)

**Selection of possible flow media**

Cold water, warm water, hot water, drinking water, process water, etc.  
(other flow media on request)

**Parts**

Pos.	Description	Fig. 20./21./22.014
1	Body	EN-GJS-400-15, EN-JS1030 (EN-GJS-400-18U-LT, EN-JS1049 on request)
2	Seat *	EPDM 73 / NBR 73 / FPM 73
3	Disc	GX5CrNiMoN19-11-2, 1.4581
5	Stem	X20Cr13+QT, 1.4021+QT X6CrNiMoTi17 12 2, 1.4571
9	Gasket *	CU
10	Hexagon head screw plug *	5.8-A2G
11	O-ring *	EPDM 73 / NBR 73 / FPM 73
14	Parallel bush	DU
26	Washer for shaft protection *	X20Cr13+QT, 1.4021+QT
27	Countersunk screw *	8.8-A2G

\* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

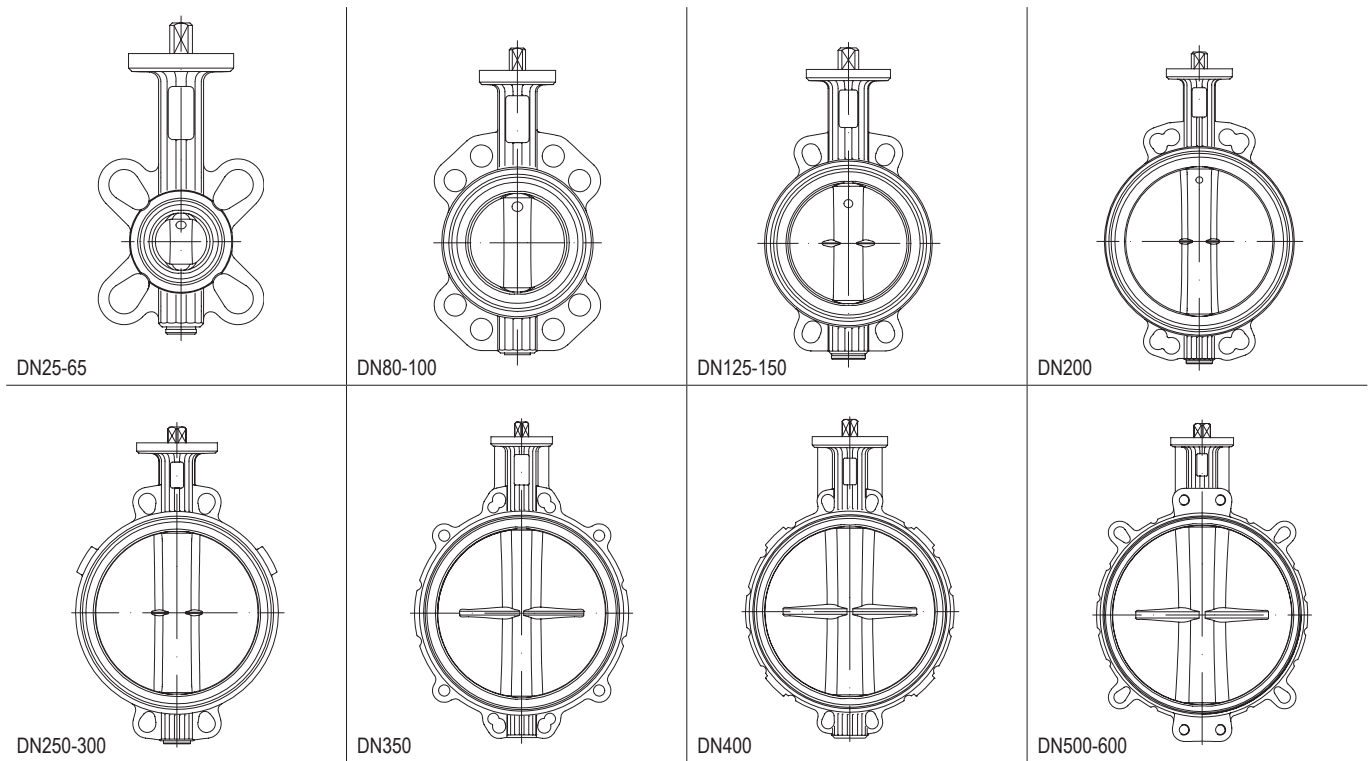
The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions and weights**

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600
L	(mm)	33	33	33	43	46	46	52	56	56	60	68	78	78	102	127	154
H	(mm)	117	117	123	129	139	147	168	186	202	236	263	292	358	407	495	555
E	(mm)	58	58	66	69	81	100	109	124	140	167	203	232	257	298	356	418
I	(mm)	19	19	19	19	19	19	19	23	23	23	24	24	24	29	38	48
SW	(mm)	11	11	11	11	11	11	11	17	17	17	22	22	22	27	36	46
Kvs-value	(m <sup>3</sup> /h)	20	24	41	98	190	302	550	930	1525	3000	5000	7300	10260	13140	20750	30430
Zeta-value	--	1,52	2,93	2,42	1,03	0,79	0,72	0,53	0,45	0,35	0,29	0,25	0,24	0,23	0,24	0,23	0,22
Weights	(kg)	1,3	1,3	1,6	2,2	2,7	3,4	4,4	6,4	7,9	11,8	21	30,4	46,8	72	132,8	217,3

Standard-flange dimensions refer to page 3

Face-to-face dimension FTF series 20 acc. to DIN EN 558-1

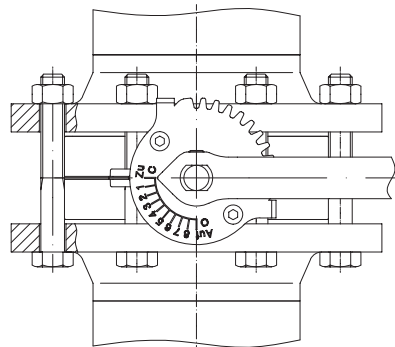

**Pressure-temperature-ratings**

Material	PN		-20°C to <-10°C	-10°C to 120°C	130°C	150°C
EN-JS1030	16	bar	--	16	15,8	15,5
EN-JS1049	16	bar	16	16	15,8	15,5

Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

**ZIVA®-Z-Wafer-type-valve**

welding neck flanges  
 PN 6 / PN 10 / PN 16  
 DIN EN 1092-1 / 11 / B1  
 Hexagon screw  
 DIN EN ISO 4016 Mat.-No. 4.6  
 Hexagon nut  
 DIN EN ISO 4034 Mat.-No. 5



The installation between, to above deviating flanges, is not or under special care possible. Please consult us.

**Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length)**

		DN	25 <sup>1)</sup>	32 <sup>1)</sup>	40	50	65	80	100	125	150	200	250	300	350	400	500	600		
PN6	ØK	(mm)	75	90	100	110	130	150	170	200	225	280	335	395	445	495	600	705		
PN6	n x Ød1	(mm)	4x11	4x14	4x14	4x14	4x14	4x18	4x18	8x18	8x18	8x18	8x18	8x22	8x22	4x22	4x22	8x26		
PN6	Quantity	(pcs.)	4	4	4	4	4	4	4	8	8	8	12	12	12	16	16	4	16	4
PN6	Thread		M10	M12	M12	M12	M12	M16	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24
PN6	Length	(mm)	80	80	80	90	90	100	110	120	120	130	140	160	160	180	220	50	250	70
PN10	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	350	400	460	515	620	725		
PN10	n x Ød1	(mm)	4x18	4x18	4x18	4x18	4x18	4x18	4x18	8x18	8x22	8x22	8x22	8x22	4x22	4x28	4x28	8x36		
PN10	Quantity	(pcs.)	4	4	4	4	4	8	8	8	8	8	12	12	16	16	16	4	16	4
PN10	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24	M24	M27	M27
PN10	Length	(mm)	90	90	90	90	110	110	120	130	130	140	150	160	160	200	220	50	260	70
PN16	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	355	410	470	525	650	770		
PN16	n x Ød1	(mm)	4x14	4x18	4x18	4x18	4x18	8x18	8x18	8x18	8x22	12x22	12x26	12x26	16x26	16x30	20x33	8x26		
PN16	Quantity	(pcs.)	4	4	4	4	4	8	8	8	8	12	12	12	16	16	16	4	16	4
PN16	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M24	M24	M24	M27	M30	M30	M33	M33
PN16	Length	(mm)	90	90	90	100	110	110	120	130	130	140	160	170	180	220	260	70	320	90

<sup>1)</sup> DN 25/32 suitable for flanges PN16 / DN 20

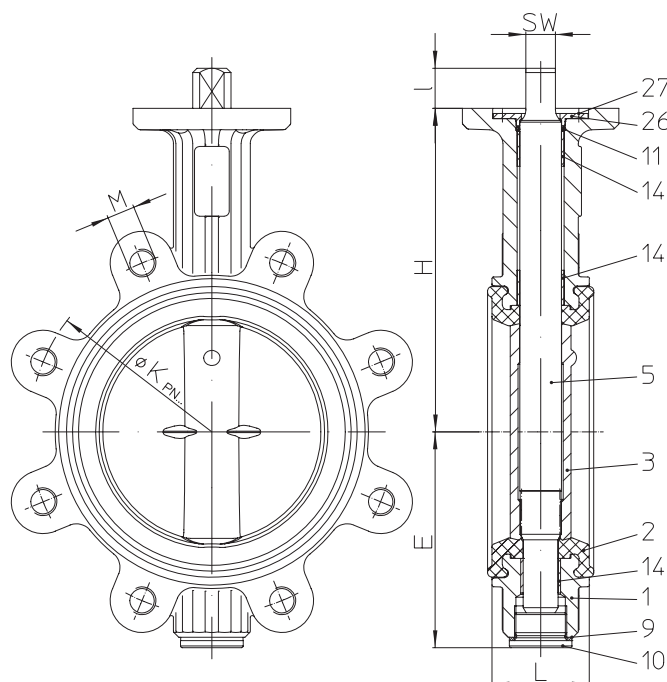
**Butterfly valve with threaded eyelets - industrial range (SG iron)**


Figure	Nominal pressure	Material	Nominal diameter
21.015	PN10	EN-JS1030	DN25-500
22.015	PN16	EN-JS1030	DN25-500
Body material EN-JS1049 on request			
Washer:	1.4581		
Stem:	<ul style="list-style-type: none"> <li>• 1.4021+QT</li> <li>• 1.4571</li> </ul>		
Seat:	<ul style="list-style-type: none"> <li>• EPDM -10 °C to +130 °C</li> <li>• NBR -10 °C to +80 °C</li> <li>• FPM -10 °C to +150 °C (not for hot water useable)</li> </ul>		
max. gauge press.:	16 bar (DN25-150) 10 bar (DN200-500)		
Actuation arrangement: (refer to page 6-11)	<ul style="list-style-type: none"> <li>• Notch lever</li> <li>• Worm gear</li> <li>• Electric actuator</li> <li>• Pneumatic actuator</li> </ul>		
<b>Test:</b>			
Sealing leakage test	EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)		
DVGW-Registration	EPDM DN25/32-600 for drinking water Reg.-Nr. NW-6201BQ0460 acc. to DIN EN 1074-1/-2 NBR DN25/32-300 for gas Reg.-Nr. NG-4313BQ0462 acc. to DIN EN 13774 (Operating range -10 °C to +60 °C)		

**Selection of possible applications**

Industrial facilities, chemical plants, ship building, special applications in the building technology, etc.  
(other applications on request)

**Selection of possible flow media**

Cold water, warm water, hot water, drinking water, process water, etc.  
(other flow media on request)

**Parts**

Pos.	Description	Fig. 20./21./22.015
1	Body	EN-GJS-400-15, EN-JS1030 (EN-GJS-400-18U-LT, EN-JS1049 on request)
2	Seat *	EPDM 73 / NBR 73 / FPM 73
3	Disc	GX5CrNiMoN19-11-2, 1.4581
5	Stem	X20Cr13+QT, 1.4021+QT      X6CrNiMoTi17 12 2, 1.4571
9	Gasket *	CU
10	Hexagon head screw plug *	5.8-A2G
11	O-ring *	EPDM 73 / NBR 73 / FPM 73
14	Parallel bush	DU
26	Washer for shaft protection *	X20Cr13+QT, 1.4021+QT
27	Countersunk screw *	8.8-A2G

\* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

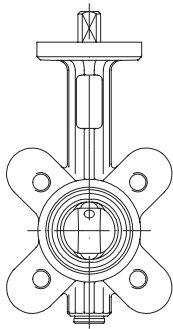
The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions and weights**

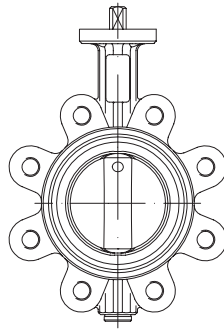
	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600
L	(mm)	33	33	33	43	46	46	52	56	56	60	68	78	78	102	127	154
H	(mm)	117	117	123	129	139	147	168	186	202	236	263	292	358	407	495	555
E	(mm)	58	58	66	69	81	100	109	124	140	167	203	232	257	298	356	418
I	(mm)	19	19	19	19	19	19	19	23	23	23	24	24	24	29	38	48
SW	(mm)	11	11	11	11	11	11	11	17	17	17	22	22	22	27	36	46
Kvs-value	(m <sup>3</sup> /h)	20	24	41	98	190	302	550	930	1525	3000	5000	7300	10260	13140	20750	30430
Zeta-value	--	1,52	2,93	2,42	1,03	0,79	0,72	0,53	0,45	0,35	0,29	0,25	0,24	0,23	0,24	0,23	0,22
Weights	(kg)	1,8	1,8	2	2,7	3,2	4,9	4,2	8,6	10,5	15,8	26,6	27,6	60	93,4	175,7	286,5

Standard-flange dimensions refer to page 4

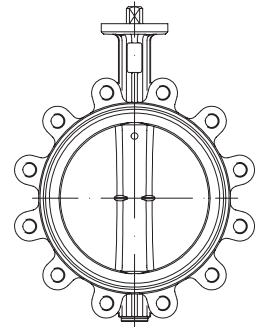
Face-to-face dimension FTF series 20 acc. to DIN EN 558-1



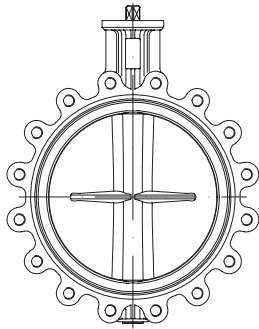
DN25-65



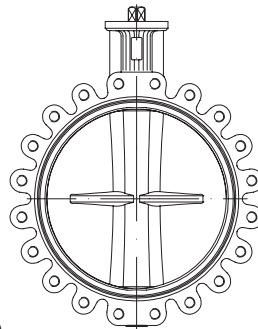
DN80-150



DN200-300



DN350-400

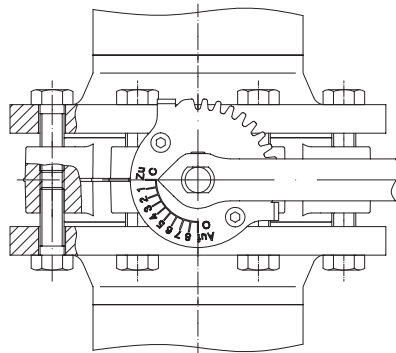


DN500-600

**Pressure-temperature-ratings**

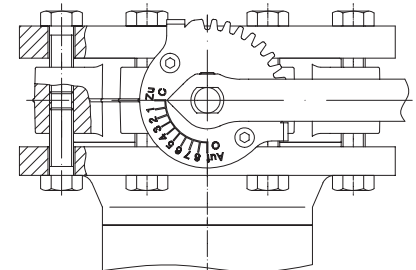
Material	PN		-20°C to <-10°C	-10°C to 120°C	130°C	150°C
EN-JS1030	16	bar	--	16	15,8	15,5
EN-JS1049	16	bar	16	16	15,8	15,5

Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.



**ZIVA®-G-Wafer-type-valve**

welding neck flanges  
PN 10 / PN 16  
DIN EN 1092-1 / 11 / B1  
Hexagon screw  
DIN EN ISO 4016 Mat.No. 4.6



**ZIVA®-G-Pipe-end-valve**

welding neck flanges  
PN 10 / PN 16  
DIN EN 1092-1 / 11 / B1  
Hexagon screw  
DIN EN ISO 4016 Mat.-No. 4.6

When used on end of line applications, a safety precaution (blind flange, etc.) is recommended.

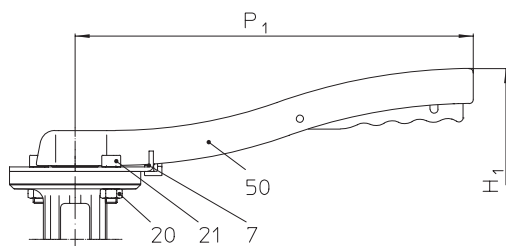
**To ensure the seat tightness, a blind or counter flange is necessary.**

The installation between, to above deviating flanges, is not or under special care possible. Please consult us.

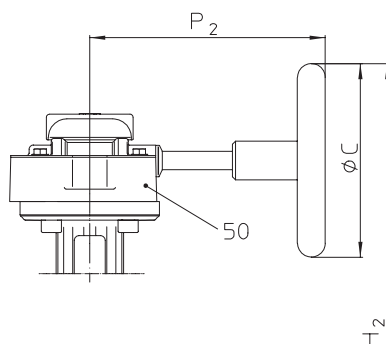
**For all installation, modification or maintenance work, please observe regulations in force and the ARI-operating instructions.**

**Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length)**

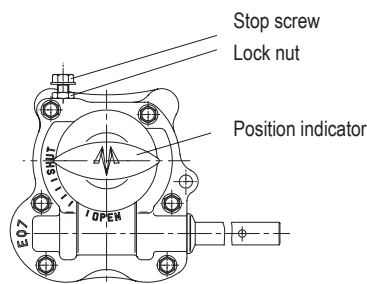
	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600			
PN10	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	350	400	460	515	620	725		
PN10	n x M	(mm)	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM20	8xM20				20xM24	20x27			
PN10	Quantity	(pcs.)	8	8	8	8	8	16	16	16	16	24	24	32	32	32	8	32	8	
PN10	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M20	M20	M24	M24	M24	M27	M27	
PN10	Length	(mm)	30	30	30	35	35	40	40	45	45	50	55	55	60	70	85	50	100	70
PN16	ØK	(mm)	85	100	110	125	145	160	180	210	240	295	355	410	470	525	650	770		
PN16	n x Ød1	(mm)	4xM12	4xM16	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM20					20xM30	20xM33			
PN16	Quantity	(pcs.)	8	8	8	8	8	16	16	16	16	24	24	24	32	32	32	8	32	8
PN16	Thread		M12	M16	M16	M16	M16	M16	M16	M16	M20	M20	M24	M24	M24	M27	M30	M30	M33	M33
PN16	Length	(mm)	30	30	30	35	35	40	40	45	45	50	55	60	60	75	100	70	120	90

**Butterfly valve with lever**

**Notch lever**

For diameters larger than DN 125 we recommend using a gear mechanism. Gear recommended for inaccessible installation (see below).


**Worm gear**

- With variable adjustment
- Self-locking



The SHUT-position can be adjusted to  $\pm 5^\circ$  by a locking screw.

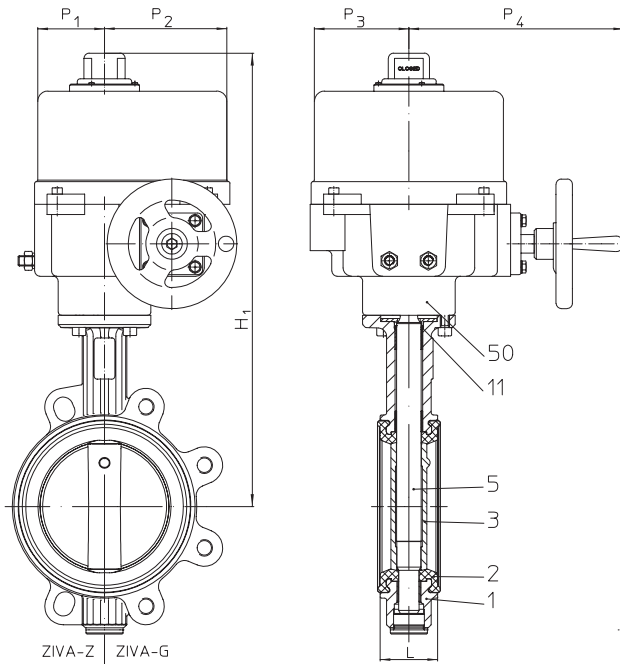
**Parts**

Pos.	Description	Fig. 20./21./22.014; 21./22.015
7	Lever cap *	S235JR, 1.0037 (KTL-coating)
20	Hexagon nut *	5-A2B
21	Pan head screw *	8.8-A2B
50	Notch lever	EN-GJS-400-15, EN-JS1030 (KTL-coating)
50	Worm gear	

\* Spare part

**Dimensions and weights**

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600
H1	(mm)	180	180	186	192	202	210	231	257	273	307	--	--	--	--	--	--
P1	(mm)	184	184	184	184	184	184	184	273	273	273	--	--	--	--	--	--
H2	(mm)	206	206	212	218	228	236	257	275	291	325	418	447	513	603	691	830
P2	(mm)	152	152	152	152	152	152	152	152	152	152	272	272	272	510	510	331
ØC	(mm)	125	125	125	125	125	125	125	125	125	125	250	250	250	315	315	450
Type of gear		SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE07	SE10	SE10	SE10	SE12	SE12	M15
ZIVA®-Z with lever	(kg)	2	2	2,4	2,9	3,5	4,1	5,1	7,7	9,2	13,1	--	--	--	--	--	--
ZIVA®-G with lever	(kg)	2,6	2,5	2,7	3,5	4,1	5,6	6,9	9,9	11,8	17,1	--	--	--	--	--	--
ZIVA®-Z with gear	(kg)	3,2	3,2	3,5	4,1	4,6	5,3	6,3	8,3	9,8	13,7	26	35,4	51,8	80,5	141	248
ZIVA®-G with gear	(kg)	3,7	3,7	3,9	4,6	5,2	6,8	8,1	10,5	12,4	17,7	31,6	42,6	65	102	184	317

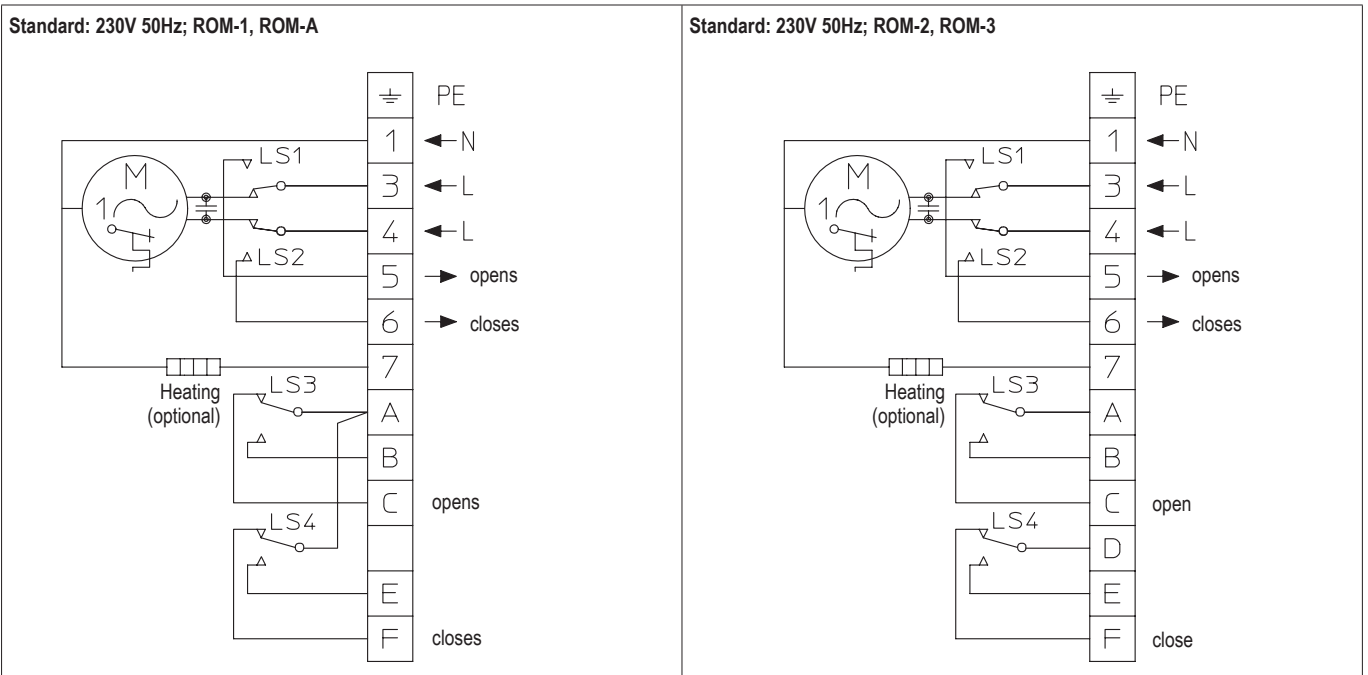
**Butterfly valve with electric rotary actuator Type: rotork**

**rotork**  
**Electric rotary actuator**

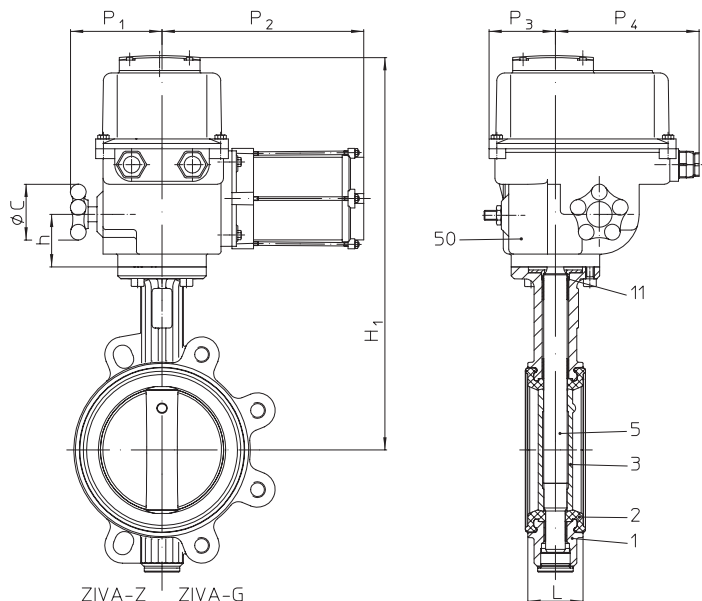
- for intermittent and continuous service, 230V 50Hz, 30% ED
- Enclosure IP 67
- Temperature guard in the motor
- Travel switch
- **Accessories:** - Potentiometer (1000 Ohm)  
 - Positioner 4-20 mA  
 - Position-transmitter 4-20 mA  
 - Heating
- **Voltages:**  
 12VDC/VAC, 24VDC/VAC, 110V  
 other voltages on request

**Dimensions and weights**

	DN	25	32	40	50	65	80	100	125	150	200
H1	(mm)	267	267	273	279	289	297	368	441	457	491
P1	(mm)	35	35	35	35	35	35	54	82	82	82
P2	(mm)	80	80	80	80	80	80	54	118	118	118
P3	(mm)	54	54	54	54	54	54	54	100	100	100
P4	(mm)	54	54	54	54	54	54	54	230	230	230
Type of actuator		ROM-1						ROM-A	ROM-2	ROM-3	
Operating time	(s)	13						24	17	26	
ZIVA®-Z	(kg)	3,3	3,3	3,6	4,2	4,7	5,4	7,4	15,4	16,9	20,8
ZIVA®-G	(kg)	3,8	3,8	4,0	4,7	5,3	6,8	9,2	17,6	19,5	24,8

For connection refer to terminal connection in the operating instructions of the actuator !



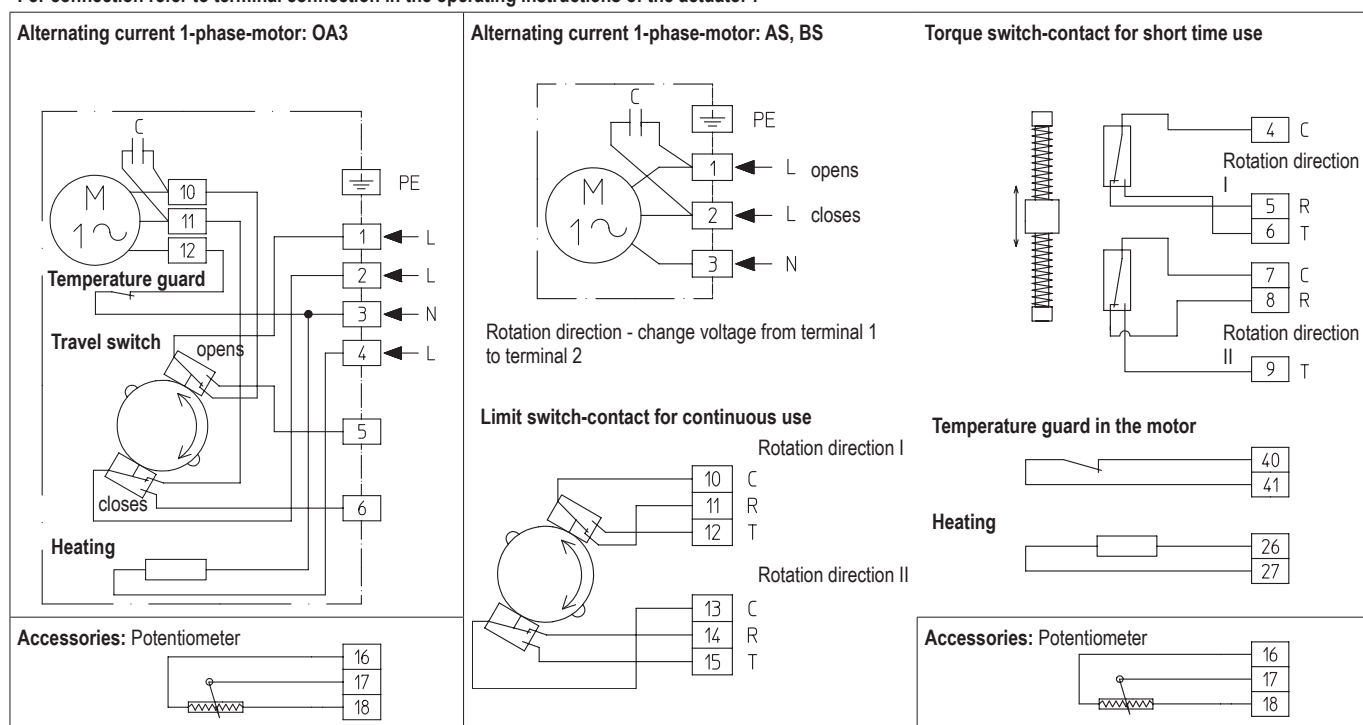
**Butterfly valve with electric rotary actuator Type: Deufra**

**Deufra**
**Electric rotary actuator**

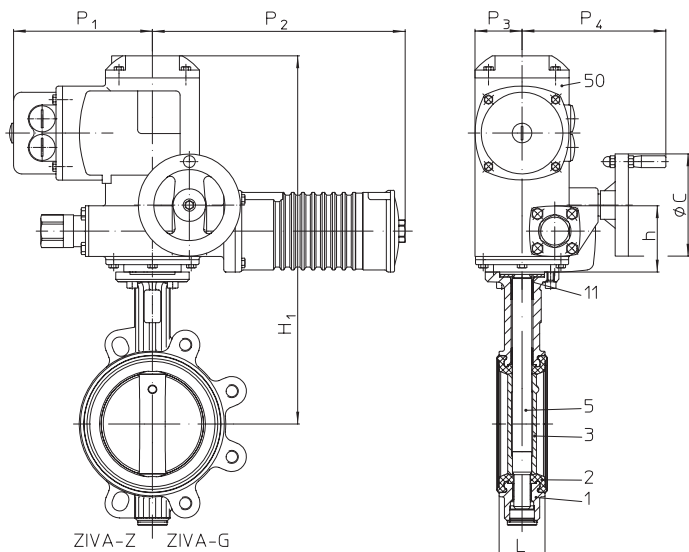
- Type of operation on/off S4 30% (optional: for control S4 50%)
- 230V 50Hz (400V 50Hz (not at OA3))
- Enclosure IP 67
- Temperature guard in the motor
- Heating
- **Accessories:** - Travel switch  
- Potentiometer  
- Valve positioner 0-10V / 4-20mA  
- Position-transmitter
- **Special actuators:** - Reset to start on failure Type FQ  
Other voltages on request

**Dimensions and weights**

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600					
H1	(mm)	341	341	347	353	363	371	392	410	426	460	443	517	583	618	706	836					
h	(mm)	53	53	53	53	53	53	53	53	53	53	100	100	100	86	86	70					
ØC	(mm)	60	60	60	60	60	60	60	60	60	100	160	250	250	250	250	300					
P1	(mm)	90	90	90	90	90	90	90	90	90	98	167	169	169	172	172	475					
P2	(mm)	160	160	160	160	160	160	202	202	202	260	312	340	340	392	392	188					
P3	(mm)	65	65	65	65	65	65	65	65	65	65	89	89	89	133	133	130					
P4	(mm)	125	125	125	125	125	125	125	125	125	125	226	226	226	284	284	333					
Type of actuator		OA3						OA6			OA8		OA15		AS25		AS50		BS100		AS200	
Operating time	(s)	6						6			6		15		10		30		30		70	
ZIVA®-Z	(kg)	7,3	7,3	7,6	8,2	8,7	9,4	10,4	13,4	14,9	19,8	41	49,4	65,8	101	161,8	287,2					
ZIVA®-G	(kg)	7,8	7,8	8	8,7	9,3	10,9	12,2	15,6	17,5	23,8	46,6	56,6	79	122,4	204,7	356,2					

For connection refer to terminal connection in the operating instructions of the actuator !



**Butterfly valve with electric rotary actuator Type: Auma**

**Auma  
Electric rotary actuator**

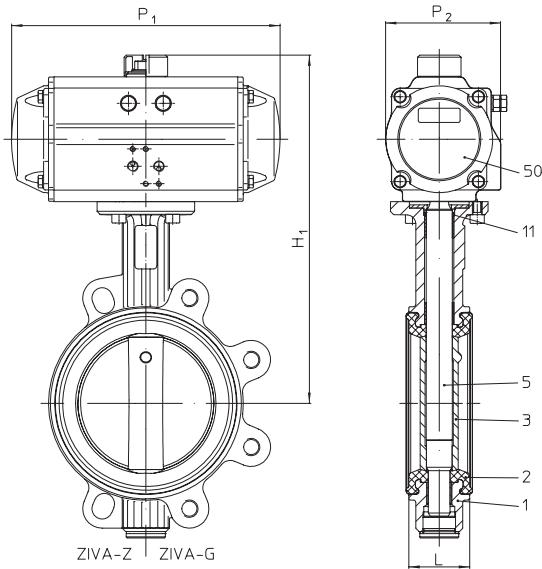
- for temporary service S 2-15 min. (or control S4 25%)
- 400V 50Hz (230V 50Hz)
- Enclosure IP 67
- Temperature guard in the motor
- Heating
- Accessories:
  - Travel switch
  - Potentiometer
  - Auma Matic
  - Valve positioner 0-10V / 4-20mA
  - Position-transmitter
  - Other voltages on request

**Dimensions and weights**

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600	
H1	(mm)	392	392	389	404	414	422	443	461	477	511	538	583	649	720	808	867	
h	(mm)	82	82	82	82	82	82	82	82	82	82	82	88	88	102	102	115	
ØC	(mm)	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	
P1	(mm)	195	195	195	195	195	195	195	195	195	195	195	205	205	205	205	194	
P2	(mm)	291	291	291	291	291	291	291	291	291	291	291	301	301	301	301	537	
P3	(mm)	58	58	58	58	58	58	58	58	58	58	58	75	75	75	75	139	
P4	(mm)	191	191	191	191	191	191	191	191	191	191	191	216	216	233	233	374	
Type of actuator		SG05										SG07		SG10		SG12		SA07.5
Operating time	(s)	16										16	16	32		69		
ZIVA®-Z	(kg)	19,6	19,3	19,6	20,2	20,7	21,4	22,4	24,4	25,9	29,8	39	53,4	69,8	101	161,8	286,7	
ZIVA®-G	(kg)	19,8	19,8	20	20,7	21,3	22,9	24,2	26,6	28,5	33,8	44,6	60,6	83	122,4	204,7	356	

For connection refer to terminal connection in the operating instructions of the actuator !

<b>3-phase current actuator</b> 	<b>Standard</b> <p>S1 - DSR / S2 - DÖL = Torque switch                  S3 - WSR / S4 - WÖL = Travel switch                  F1 - Th = Thermal switch                  R1 - H = Heating                  R2 = Potentiometer</p>	<b>Heating</b> <p><b>Accessories: Potentiometer</b>  </p>
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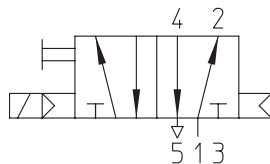
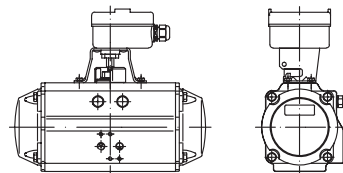
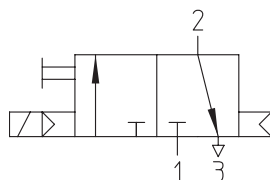
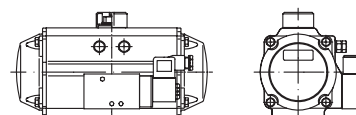
**Butterfly valve with pneumatic rotary actuator Type: AIR TORQUE**

**AIR TORQUE**
**Pneumatic rotary actuator**

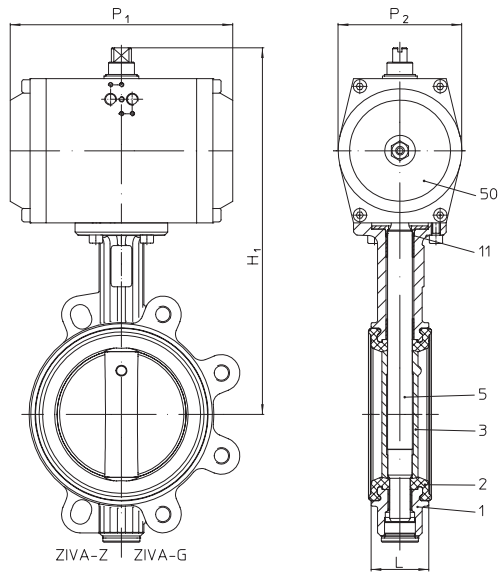
- Function: double acting  
single acting, Spring closes (opens)
- Actuating pressure 6 bar (=0,6 MPa)
- Position indicator
- **Accessories:** - Limit switch open / close  
- Solenoid valve  
- Exhaust silencer with throttling function  
- Valve positioner  
Other actuating pressures on request

**Dimensions and weights**

		DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600					
double acting	H1	(mm)	222	222	228	234	244	252	290	321	337	383	438	499	565	625	782	935					
	P1	(mm)	159	159	159	159	159	159	211	248	248	269	315	409	409	438	543	728					
	P2	(mm)	83	83	83	83	83	83	95	106	106	123	141	172	172	187	222	329					
	Type of actuator		DR30						DR60			DR100		DR150		DR220		DR450		DR600		DR1200	DR3000
	ZIVA®-Z	(kg)	2,9	2,9	3,2	3,8	4,3	5	7	10,2	11,7	17,2	29,4	44,9	61,3	91,8	186,3	300,2					
	ZIVA®-G	(kg)	3,4	3,4	3,6	4,3	4,9	6,5	8,9	12,4	14,3	21,2	35	52	74,5	113,2	211,2	369,5					
single acting	H1	(mm)	222	222	228	234	261	282	315	361	389	443	490	587	653	756	867						
	P1	(mm)	159	159	159	159	211	248	269	315	345	409	438	543	543	621	684						
	P2	(mm)	83	83	83	83	95	106	123	141	152	172	187	222	222	262	330						
	Type of actuator (closes)		30SC6				60SC6		100SC6	150SC6	220SC6	300SC6	450SC6	600SC6	1200SC6	2000SC6	3000SC6						
	Type of actuator (opens)		30SO5				60SO5		100SO5	150SO5	220SO5	300SO5	450SO5	600SO5	1200SO5	2000SO5	3000SO5						
	ZIVA®-Z	(kg)	3	3	3,3	3,9	5,9	7,8	10,9	16,2	20,5	29,9	45	75,5	91,9	136,2	235						
ZIVA®-G	(kg)	3,5	3,5	3,7	4,2	6,5	9,3	12,7	18,4	23,1	33,9	50,6	82,7	105,1	157,6	277,9							

on request

**For connection refer to terminal connection in the operating instructions of the actuator !**
**Solenoid valve:**  
 for control of double acting actuators  
**5/2 - way**

**Accessories:** Limit switch in housing

**Solenoid valve:**  
 for control of single acting actuators  
**3/2 - way**

**Accessories:** Solenoid valve


**Butterfly valve with pneumatic rotary actuator Type: bar**

**bar**
**Pneumatic rotary actuator**

- Function: double acting  
single acting, Spring closes (opens)
- Actuating pressure 6 bar (=0,6 MPa)
- Accessories: - Limit switch open / close  
- Solenoid valve  
- Exhaust silencer with throttling function  
- Position indicator  
- Valve positioner  
Other actuating pressures on request

**Dimensions and weights**

		DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600	
double acting	H1	(mm)	221	221	227	233	243	265	286	333	349	406	433	520	586	635	780	887	
	P1	(mm)	127	127	127	127	127	140	140	209	209	222	292	337	337	377	462	683	
	P2	(mm)	72	72	72	72	72	82	82	108	108	120	120	172	172	172	224	272	
	Type of actuator		GTD 58/90						GTD 68/90			GTD 98/90		GTD 110/90	GTD 115/90	GTD 143/90	GTD 163/90	GTD 210/90	GTD 254/90
	ZIVA®-Z	(kg)	2,2	2,2	2,5	3	3,6	4,9	5,8	9,8	11,3	17	28,1	44,8	61,2	88,4	164,6	286,4	
	ZIVA®-G	(kg)	2,7	2,7	2,9	3,6	4,2	6,3	7,6	12	13,9	21	33,7	52	74,4	109,8	207,5	355,7	
single acting	H1	(mm)	235	235	241	247	269	285	338	356	372	426	491	577	643	739	827	on request	
	P1	(mm)	140	140	140	140	161	182	222	222	292	298	337	462	462	603	603		
	P2	(mm)	82	82	82	82	94	100	120	120	120	137	172	224	224	272	272		
	Type of actuator (closes)		GTE 68/90						GTE 78/90	GTE 88/90	GTE 98/90	GTE 110/90	GTE 115/90	GTE 127/90	GTE 143/90	GTE 210/90	GTE 250/90		
	Type of actuator (opens)		GTE 68/90						GTE 78/90	GTE 88/90	GTE 110/90		GTE 115/90	GTE 127/90	GTE 143/90	GTE 210/90	GTE 250/90		
	ZIVA®-Z	(kg)	2,9	2,9	3,2	3,8	5,2	6,4	8,4	12,6	16,3	22,5	39	70	86,4	142,6	203,4		
ZIVA®-G	(kg)	3,5	3,4	3,6	4,3	5,8	7,8	10,2	14,8	18,8	26,5	44,7	77,2	99,6	164	246,3			

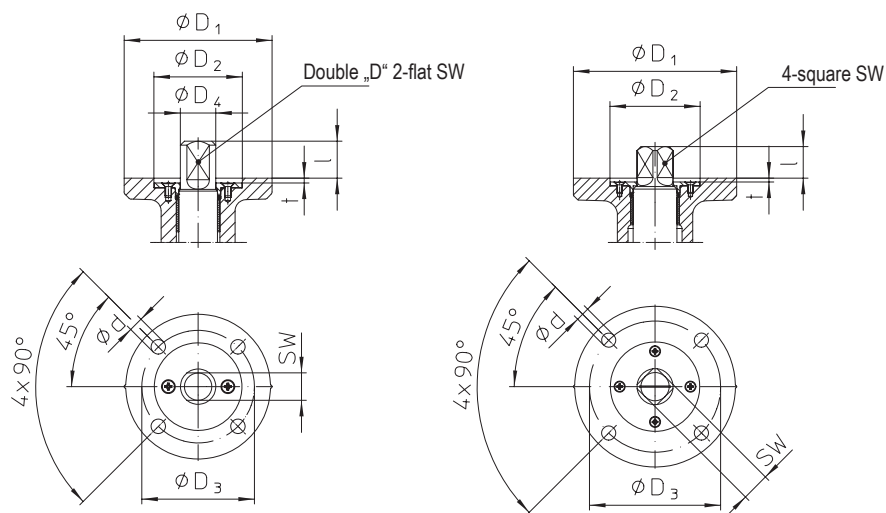
**For connection refer to terminal connection in the operating instructions of the actuator !**

<p><b>Solenoid valve:</b> for control of double acting actuators <b>5/2 - way</b></p>	<p><b>Accessories:</b> Limit switch in housing</p>	<p><b>Accessories:</b> Limit switch</p>
<p><b>Solenoid valve:</b> for control of single acting actuators <b>3/2 - way</b></p>	<p><b>Accessories:</b> Solenoid valve</p>	

**Actuator flange connection**

DN25-200

DN250-600



	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600
Connection ISO5211		F 05							F 07			F 10			F 14		F16
Double „D“ 2-flat SW	(mm)	11 <sub>d11</sub>							17 <sub>d11</sub>			--			--		--
4-square SW	(mm)	--							--			22 <sub>d11</sub>		27 <sub>d11</sub> 36 <sub>d11</sub>		46 <sub>d11</sub>	
Ød	(mm)	7							9			11			18		22
ØD1	(mm)	65							90			125			175		210
ØD2	(mm)	35							55			70			100		130
ØD3	(mm)	50							70			102			140		165
ØD4	(mm)	14							22			--			--		--
l	(mm)	19							23			24			29 38		48
t	(mm)	3							3			3			4		5

**Please indicate when ordering**

- Figure-No.
- Nominal pressure
- Nominal diameter
- Soft seal seat material
- stem / disc material
- Actuation arrangement
- Special design / accessories

Please indicate in your order, if the valves are to be installed in hazardous areas (ATEX).

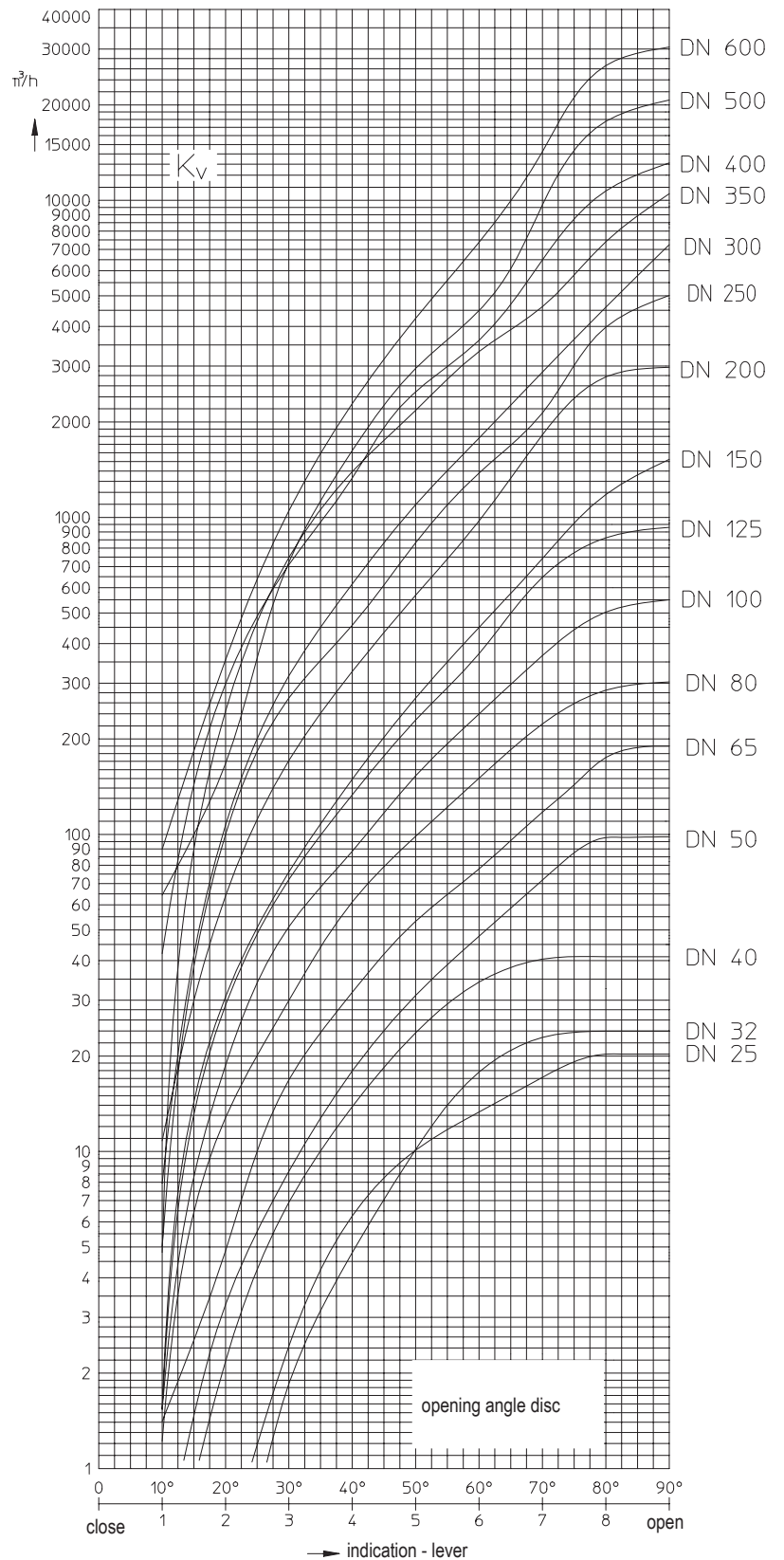
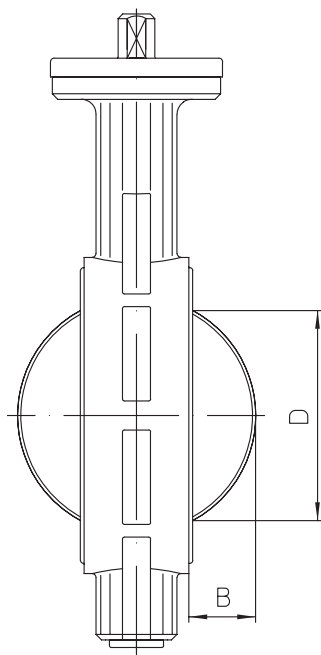
Dimensions in mm  
 Weights in kg  
 1 bar  $\hat{=}$  10<sup>5</sup> Pa  $\hat{=}$  0,1 MPa  
 Kvs in m<sup>3</sup>/h

**Example:**

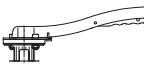
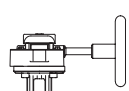
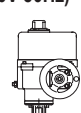
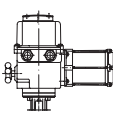
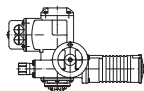


Figure 22.014; nominal pressure PN16; nominal diameter DN100; seat of EPDM, disc/stem of 1.4581/1.4021, with notch lever.

**Kvs-value and Zeta-value**

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600
<b>Kvs-value</b>	(m <sup>3</sup> /h)	20	24	41	98	190	302	550	930	1525	3000	5000	7300	10260	13140	20750	30430
<b>Zeta-value</b>	--	1,52	2,93	2,42	1,03	0,79	0,72	0,53	0,45	0,35	0,29	0,25	0,24	0,23	0,24	0,23	0,22


**Difference between disc outside-diameter and face-to-face**

	DN	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600
<b>B</b>	(mm)	--	--	5	5	11	18	25	36	48	71	91	112	132	147	188	224
<b>D</b>	(mm)	--	--	26	29	49	68	88	115	142	194	243	292	333	383	486	580

DN		25-50	65	80	100	125	150	200	250	300	350	400	500	600					
Connection-Flange ISO 5211		F 05				F 07			F 10			F 14		F 16					
Double „D“ 2-flat SW	(mm)	11 <sub>d11</sub>				17 <sub>d11</sub>			--			--		--					
4-square SW	(mm)	--				--			22 <sub>d11</sub>			27 <sub>d11</sub>	36 <sub>d11</sub>	46 <sub>d11</sub>					
Manual actuation	Notch lever 	Size		I			II			--									
	Worm gear 	Type		SE07					SE10			SE12		M15					
Electric rotary actuator	rotork (230V 50Hz) 	Type		ROM-1		ROM-A	ROM-2	ROM-3		--									
	Deufra (230V 50Hz) 	Type		OA3		OA6	OA8	OA15	AS25	AS50	BS100		AS200						
	Auma (400V 50Hz) 	Type		SG05					SG07	SG10	SG12		SA07.5 +VZ4.3 +SG 125.3						
Pneumatic rotary actuator	AIR TORQUE 	double acting		Type		DR30		DR60	DR100	DR150	DR220	DR450	DR600	DR1200	DR3000				
		single acting	Spring closes		Type		30SC6	60SC6	100SC6	150SC6	220SC6	300SC6	450SC6	600SC6	1200SC6	2000SC6	3000SC6	on request	
	Spring opens		Type		30SO5	60SO5	100SO5		150SO5	220SO5		450SO5	900SO5		1200SO5	2000SO5			
	bar 	double acting		Type		GTD58/90		GTD68/90		GTD98/90		GTD110/90	GTD115/90	GTD143/90		GTD163/90	GTD210/90	GTD254/90	
		single acting	Spring closes		Type		GTE68/90-12	GTE78/90-10	GTE88/90-10	GTE98/90-12	GTE110/90-12	GTE115/90-12	GTE127/90-12	GTE143/90-12	GTE210/90-10		GTE250/90-8		on request
			Spring opens		Type		GTE68/90-8	GTE78/90-8	GTE88/90-8	GTE110/90-8		GTE115/90-6	GTE127/90-8	GTE143/90-8	GTE210/90-8		GTE250/90-6		